ENTOMOLOGY.—*Notes on* Gypona octolineata (*Say*).[1] J. W. SCRIVENER, Bureau of Entomology, U. S. Department of Agriculture. (Communicated by J. S. WADE.)

In connection with the investigations of leafhoppers that are being carried on by the Bureau of Entomology at Arlington Experiment Farm (post office, Rosslyn, Virginia), some seedling apple trees grown on the experiment farm and apparently infested with some species of leafhoppers were brought into the greenhouse January 10, 1930. By

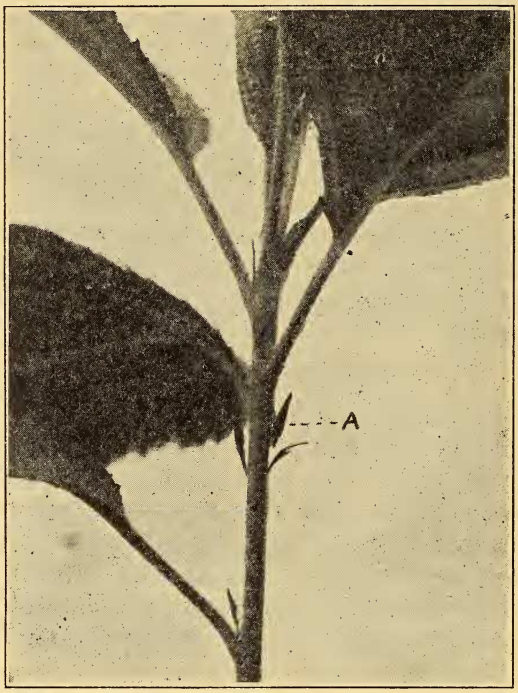

Fig. 1.—Nymph of *Gypona octolineata* on apple stem at A. When this nymph was photographed it had not settled down to feeding, so the head is not in contact with the stem; neither is the abdomen curved outward from the stem in the usual manner, in which position the mimicry of the stipules is most pronounced.

January 28 a number of nymphs of *Gypona octolineata*[2] had hatched out on them. These were kept upon seedling apple plants in celluloid cages in order that their development might be studied. The entire nymphal development of a single individual of this species was observed. It covered 38 days—from February 26 to April 5. The

[1] Received March 27, 1931.

[2] Adults of this material were kindly identified as *Gypona octolineata* Say, var. *striata* Burm., by Dr. Herbert Osborn.

temperatures in the greenhouse during this period ranged from 75° to 85°F. As stated, the leafhopper was confined upon the host plant in a small celluloid cage, but in order that it might have reasonably good host material, it was moved to a fresh leaf every four or five days. The duration of the five nymphal stages, increasing in length with each instar, were 1, 4, 5, 10, and 18 days, respectively.

The main purpose of this brief article is to record the apparent protective mimicry which is enjoyed by the nymphs of this species when they follow their normal feeding habits. When placed upon the plants many of them soon found their way to the base of the petioles of the leaves and at this point they so closely resembled the stipules (Figure 1, **A**) that anyone unaccustomed to looking for them would have had considerable difficulty in finding them. They moved about very little after they had settled down for feeding on the stem. In one instance an individual was known to have fed for three weeks in the same position. This was determined from microscopic sections of the plant material to which this individual was exposed during the period. Feeding on the stem takes place with the head downward and with the abdomen pointing upward and curving outward from the stem. In this position the leafhopper is very similar in appearance to the stipules of the plant, which are of the same green color as the nymphs.

ENTOMOLOGY.—*A revisional study of the genus* Pseudopityophthorus *Sw. in North America.*[1] M. W. BLACKMAN, Bureau of Entomology, U. S. Department of Agriculture. (Communicated by HAROLD MORRISON.)

In a former paper on the genus *Pityophthorus* Eichh. and its allies in North America the writer (1928) treated in detail the taxonomy of the genera *Myeloborus* Blackm., *Pityophthorus* Eichh., *Pityoborus* Blackm., and *Pityophilus* Blackm., gave keys to the genera of the Pityophthori (which includes *Conophthorus* Hopk., *Pseudopityophthorus* Sw., and *Gnathotrichus* Eichh. in addition to those just mentioned), and discussed in a general way the relationships of these various genera. The present paper should be considered as a continuation of the larger paper and deals with the genera *Pseudopityophthorus* Sw., while another paper on *Gnathotrichus* Eichh. will follow immediately.

This paper is based upon a study of the Scolytid material in the National Museum and in the writer's own collection.

[1] Received April 16, 1931.